

AMENDMENT TO THE SPECIFICATION:

Please amend paragraph [42] beginning at page 9 as follows:

[42] Some exemplary uses of the spatially mapped data will now be described. A researcher may desire information regarding mRNA synthesis at a particular location, expressed in x, y, z coordinates, of a tissue sample. A 3-dimensional view of the tissue would be displayed on the computer screen allowing the researcher to click on a voxel at the desired location. Techniques for creating an interactive 3-D volume visualization are described in the MultiVIS references described above. For example, as described in the MultiVIS paper, bits in the pixel displayed in the image can store the x,y,z coordinates of the pixel in the multidimensional spatial matrix of image data. These coordinates can be used to access the biological data obtained from analyzing the coded ~~indexed~~ micro dissected sample section indexed by the same x,y,z coordinates. By clicking on a particular part of the image the biological data indexed in those pixels can be accessed. The mRNA synthesis data mapped to the voxel would be displayed in a variety of possible formats, e.g., as a table or a graph.